Abstract of the Disclosure

An in vivo electrochemical sensor including a working electrode, and an analyte-responsive sensing layer proximate the working electrode. The sensing layer is exposed at an edge of the sensor, wherein the sensor signal is limited, at least in part, by mass transport of analyte to the sensing layer. The sensor is configured and arranged for implantation into the body of a mammal for contact with body fluids of the mammal. The analyte diffuses to the sensing element via the edge of the sensor, thereby restricting mass transport of the analyte to the sensing element. This is because the solution-contacting surface area of the sensor edge is much smaller than an open face of the sensing layer.